

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A wireless communication system comprising:  
a first transceiver;  
a second transceiver;  
a third transceiver in communication with the first transceiver; and  
a controller configured to effectuate a soft handoff from the first transceiver to the second transceiver using a set of optimum parameters that are determined based on a current position of the third transceiver, ~~wherein the optimum parameters depend on geographical characteristics of a cell coverage area in which the third transceiver is positioned~~ wherein the set of optimum parameters includes a set of optimum system-access parameters that are used when a mobile unit comprising the third transceiver is operating in a system access state.
2. (Original) The system of claim 1 wherein the controller is further configured to determine the current position of the third transceiver.
3. (Original) The system of claim 2, wherein the current position includes a position of a sector within a cell coverage area.
4. (Currently Amended) The system of claim 1 wherein the set of optimum parameters also includes ~~a set of optimum system-access parameters and a set of optimum soft-handoff parameters, wherein the system-access parameters are used to control the performance of a mobile unit comprising the third transceiver when the mobile unit is operating in a system access state.~~
5. (Original) The system of claim 4 wherein the controller is further configured to determine the set of optimum soft-handoff parameters.

6. (Currently Amended) The system of claim ~~[[4]]~~ 1, wherein the controller is further configured to determine the set of optimum system-access parameters.

7. (Currently Amended) A mobile unit comprising:  
a receiver unit configured to receive a set of optimum system-access parameters determined based on a current position of the mobile unit, wherein the optimum system-access parameters are used when the mobile unit is operating in a system access state; and  
a controller configured to effectuate a soft handoff of the mobile unit based on the received set of optimum system-access parameters, ~~wherein the optimum system-access parameters depend on geographical characteristics of a cell coverage area in which the mobile unit is positioned.~~

8. (Currently Amended) A mobile unit comprising:  
a receiver unit configured to receive a set of optimum system-access parameters and a set of optimum soft-handoff parameters determined based on a current position of the mobile unit, wherein the optimum system-access parameters are used when the mobile unit is operating in a system access state; and  
a controller configured to effectuate a soft handoff from a first base station to a second base station based on the received set of optimum soft-handoff parameters, ~~wherein the optimum soft-handoff parameters depend on geographical characteristics of a cell coverage area in which the mobile unit is positioned.~~

9. (Original) The mobile unit of claim 8 wherein the controller is further configured to determine the current position of the mobile unit.

10. (Canceled)

11. (Previously Presented) The mobile unit of claim 9 wherein the current position includes a position of a sector within the cell coverage area.

12. (Canceled)

13. (Currently Amended) The mobile unit of claim ~~[[12]]~~ 8, further comprising means for controlling the performance of the mobile unit based on the received set of optimum system access parameters.

14. (Currently Amended) A base station comprising:  
a transmitter unit configured to transmit a set of optimum system-access parameters determined based on a current position of a mobile unit; and  
a controller configured to effectuate a soft handoff of the mobile unit based on the set of optimum system-access parameters, wherein the optimum system-access parameters are used when the mobile unit is operating in a system access state ~~wherein the optimum system-access parameters depend on geographical characteristics of a cell coverage area in which the mobile unit is positioned.~~

15. (Currently Amended) A base station comprising:  
a transmitter unit configured to transmit to the mobile unit a set of optimum system-access parameters and a set of optimum soft-handoff parameters determined based on a current position of the mobile unit in a first coverage area; and  
a controller configured to effectuate a soft handoff from the first coverage area to a second coverage area based on the set of optimum soft-handoff parameters and to use the optimum system-access parameters when the mobile unit is operating in a system access state; ~~wherein the optimum soft-handoff parameters depend on geographical characteristics of a cell coverage area in which the mobile unit is positioned.~~

16. (Original) The base station of claim 15 wherein the controller is further configured to determine the current position of the mobile unit in the first coverage area.

17. (Canceled)

18. (Previously Presented) The base station of claim 15 wherein the first coverage area includes a sector within the cell coverage area.

19. (Original) The base station of claim 15 wherein the controller is further configured to determine the set of soft-handoff parameters.

20-21. (Canceled)

22. (Currently Amended) The base station of claim ~~[[21]]~~ 15, wherein the controller is further configured to determine the set of optimum soft-handoff parameters and ~~[[a]]~~ the set of optimum system-access parameters.

23. (Currently Amended) A method for effectuating soft handoff, comprising:  
determining a current position of a mobile unit in a first coverage area;  
determining a set of optimum parameters based on the current position of the mobile unit;  
and

effectuating a soft handoff from the first coverage area to a second coverage area using the set of optimum parameters, wherein the set of optimum parameters includes a set of optimum system-access parameters that are used when the mobile unit is operating in a system access state wherein the optimum parameters depend on geographical characteristics of a cell coverage area in which the mobile unit is positioned.

24. (Currently Amended) The method of claim 23 wherein ~~the determining the set of optimum parameters includes determining a set of optimum system access parameters and determining the set of optimum parameters also includes~~ a set of optimum soft-handoff parameters.

25. (Withdrawn) A method for updating a current set of parameters in a mobile unit, comprising:  
determining a current position of the mobile unit in a first coverage area;  
determining a set of optimum parameters based on the current position of the mobile unit; and  
updating a current set of parameters in the mobile unit with the set of optimum parameters.

26. (Withdrawn) The method of claim 25 wherein the determining the set of optimum parameters includes determining a set of optimum system-access parameters and a set of optimum soft-handoff parameters.

27. (Withdrawn) The method of claim 25 wherein the current position includes a sector within a cell coverage area.

28. (Withdrawn) A method for restricting mobility of a mobile unit in a telecommunication system, the method comprising:

- determining a current position of the mobile unit;
- determining a set of parameters based on the current position of the mobile unit; and
- preventing the mobile unit from performing based on the set of parameters if the current position of the mobile unit is in a restricted zone.

29. (Withdrawn) The method of claim 28 wherein the determining the set of parameters includes determining a set of system-access parameters and a set of handoff parameters.

30. (Withdrawn) The method of claim 29 wherein the preventing the mobile unit from performing includes preventing the mobile unit from effectuating a handoff.

31. (Withdrawn) The method of claim 29 wherein the preventing the mobile unit from performing includes preventing the mobile unit from system access.

32. (Currently Amended) A computer-program product for effectuating soft handoff, the computer-program product comprising a computer-readable medium having instructions thereon, the instructions comprising:

- code for determining a current position of a mobile unit in a first coverage area;
- code for determining a set of optimum parameters based on the current position of the mobile unit; and

- code for effectuating a soft handoff from the first coverage area to a second coverage area using the set of optimum parameters, wherein the set of optimum parameters includes a set of optimum system-access parameters that are used when the mobile unit is operating in a system

~~access state wherein the optimum parameters depend on geographical characteristics of a cell coverage area in which the mobile unit is positioned.~~

33. (Withdrawn) A computer readable medium embodying a method for updating a set of parameters in a mobile unit, the method comprising:  
determining a current position of the mobile unit;  
determining a set of optimum parameters based on the current position of the mobile unit; and  
updating a current set of parameters in the mobile unit with the set of optimum parameters.

34. (Withdrawn) A computer readable medium embodying a method for restricting mobility of a mobile unit in a telecommunication system, the method comprising:  
determining a current position of the mobile unit;  
determining a set of parameters based on the current position of the mobile unit; and  
preventing the mobile unit from performing based on the set of parameters if the current position of the mobile unit is in a restricted zone.

35. (Currently Amended) An apparatus for effectuating soft handoff, comprising:  
means for determining a current position of a mobile unit in a first coverage area;  
means for determining a set of optimum parameters based on the current position of the mobile unit; and  
means for effectuating a soft handoff from the first coverage area to a second coverage area using the set of optimum parameters, wherein the set of optimum parameters includes a set of optimum system-access parameters that are used when the mobile unit is operating in a system access state wherein the optimum parameters depend on geographical characteristics of a cell coverage area in which the mobile unit is positioned.

36. (Currently Amended) An apparatus for effectuating soft handoff, comprising:  
a memory unit; and  
a digital signal processing (DSP) unit communicatively coupled to the memory unit, the DSP being capable of:

determining a current position of a mobile unit in a first coverage area;  
determining a set of optimum parameters based on the current position of the mobile unit;  
and

effectuating a soft handoff from the first coverage area to a second coverage area using the set of optimum parameters, wherein the set of optimum parameters includes a set of optimum system-access parameters that are used when the mobile unit is operating in a system access state wherein the optimum parameters depend on geographical characteristics of a cell coverage area in which the mobile unit is positioned.

37. (Withdrawn) An apparatus for updating a set of parameters in a mobile unit, comprising:

means for determining a current position of the mobile unit;  
means for determining a set of optimum parameters based on the current position of the mobile unit; and  
means for updating a current set of parameters in the mobile unit with the set of optimum parameters.

38. (Withdrawn) An apparatus for updating a set of parameters in a mobile unit, comprising:

a memory unit; and  
a digital signal processing (DSP) unit communicatively coupled to the memory unit, the DSP being capable of:  
determining a current position of the mobile unit;  
determining a set of optimum parameters based on the current position of the mobile unit; and  
updating a current set of parameters in the mobile unit with the set of optimum parameters.

39. (Withdrawn) An apparatus for restricting mobility of a mobile unit in a telecommunication system, comprising:

means for determining a current position of the mobile unit;

means for determining a set of parameters based on the current position of the mobile unit; and

means for preventing the mobile unit from performing based on the set of parameters if the current position of the mobile unit is in a restricted zone.

40. (Withdrawn) An apparatus for restricting mobility of a mobile unit in a telecommunication system, comprising:

a memory unit; and

a digital signal processing (DSP) unit communicatively coupled to the memory unit, the DSP being capable of:

determining a set of parameters based on the current position of the mobile unit; and

preventing the mobile unit from performing based on the set of parameters if the current position of the mobile unit is in a restricted zone.

41. (Withdrawn) A method for optimizing systems parameters in a telecommunication system, including a mobile unit and an intelligent system, the method comprising:

tracking performance of the mobile unit in a geographical area by the intelligent system; and

optimizing the system parameters based on the performance of the mobile unit if the mobile unit is re-traversing the geographical area.

42. (Withdrawn) A computer readable medium embodying a method for optimizing systems parameters in a telecommunication system, including a mobile unit and an intelligent system, the method comprising:

tracking performance of the mobile unit in a geographical area by the intelligent system; and

optimizing the system parameters based on the performance of the mobile unit if the mobile unit is re-traversing the geographical area.



43. (Withdrawn) An apparatus for optimizing systems parameters in a telecommunication system, comprising:

means for tracking performance of a mobile unit in a geographical area by the intelligent system; and

means for optimizing the system parameters based on the performance of the mobile unit if the mobile unit is re-traversing the geographical area.

44. (Withdrawn) An apparatus for optimizing systems parameters in a telecommunication system, comprising:

a memory unit;

an intelligent system communicatively coupled to the memory unit, the intelligent system being capable of tracking performance of a mobile unit in a geographical area; and

a digital signal processing (DSP) unit communicatively coupled to the memory unit, the DSP being capable of optimizing the system parameters based on the performance of the mobile unit if the mobile unit is re-traversing the geographical area.

45. (New) The method of claim 24, further comprising transmitting the set of optimum system-access parameters and the set of optimum soft-handoff parameters to the mobile unit in an in-traffic system parameters message.

46. (New) The method of claim 24, further comprising determining the set of optimum system-access parameters and the set of optimum soft-handoff parameters when the mobile unit moves into a new coverage area.

47. (New) The method of claim 46, wherein determining the set of optimum system-access parameters and the set of optimum soft-handoff parameters comprises accessing a position database that stores position information about various coverage areas, and that also stores optimum system-access and soft-handoff parameters associated with each coverage area.